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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/743,738	01/16/2001	Hans Nusskern	14989.260	7535

7590

07/30/2002

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EXAMINER

GARCIA, ERNESTO

ART UNIT

PAPER NUMBER

3679

DATE MAILED: 07/30/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/743,738

Applicant(s)

NUSSKERN ET AL.

Examiner

Ernesto Garcia

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 April 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) 5-20 and 27-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☒ Claim(s) 4 and 21-26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 January 2001 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3 and 4. 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of claims 1-4 and 21-26 in Paper No. 7 is acknowledged. The traversal is on the ground(s) that the embodiments showing a compression spring, a leg spring, and a tension spring are covered by the generic claims 1-4, in which the connecting element is a spring, and these embodiments should be grouped or linked together. This is not found persuasive because the technical features between the embodiments are lacking. The embodiment having the connecting element comprising the compression spring lacks the leg spring, the tension spring, or the clamping sleeve. The embodiment having the connecting element comprising the leg spring lacks the compression spring, the tension spring, or the clamping sleeve. The embodiment having the connecting element comprising the tension spring lacks the compression spring, the leg spring, or the clamping sleeve. The embodiments having the connecting element comprising a clamping sleeve lack the compression spring, the tension spring, or the tension spring.

Furthermore, the different species of the clamping sleeve are lacking common technical features. The embodiment of one clamping sleeve lacks three sides and the embodiment of another clamping sleeve lacks the oval shape.

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The requirement is still deemed proper and is therefore made FINAL.

Claims 5-20 and 27-30 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 7.

Claim Objections

Claims 4 and 21-26 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only, or the claim cannot depend from any other multiple dependent claims. See MPEP § 608.01(n). Accordingly, the claims 4 and 21-26 have not been further treated on the merits.

Claims 1-3 are objected to because of the following informalities:

as to claim 1, the limitation "The invention relates to a" should be replaced with --A--;

as to claims 2-3, the limitation "Connecting" in line 1 should be --The connecting--. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, the limitation "connected" is unclear. Is the constructive element connected, and if so, where is it connected? It is unclear whether the applicant is claiming the at least one constructive element or another constructive element in combination with the connecting element. The limitation "at least one constructive element" in line 7 is unclear whether the element is another element other than the at least one connected constructive element recited in lines 4 and 5. The phrase "in particular" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "in particular"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d). The limitation "elastically expanded" in line 12 contradicts the limitation "elastically deformable" in line 3. Is the tensioning element elastically expanded or elastically deformable (expandable)?

Regarding claim 2, the limitation "and/or" in line 3 is indefinite. It is unclear whether the "/" is used in the alternative form "and" and "or", or "and" or "or".

Regarding claim 3, the limitations "the austenitic state" and "the tension-induced martensitic state" in line 3-lack antecedent basis.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by the German patent, DE-3,007,307.

Regarding claim 1, the German patent discloses in Figure 3 a connecting element comprising an elastically deformable tensioning element **5** (see translated abstract) and at least one constructive element **1**. The tensioning element **5** applies a holding force onto the at least one constructive element **1** thus generating a nonpositive connection. The tensioning element **5** comprises a spring material, consisting of a superelastic shape memory alloy, in particular a nickel-titanium alloy, elastically expanded.

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Regarding claim 2, the holding force is generated by bending forces or shear forces originated by the tensioning element 5

Regarding claim 3, applicant is reminded that the method of "converting, during assembly, the tensioning element from an austenitic state to a tension-induced martensitic state, by elastic tensioning or expanding, respectively" is not germane to the issue of patentability of the device itself. Therefore, this limitation has been given limited patentable weight. See MPEP ' 2113.

Conclusion

The following prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The publication, "Engineering Aspects of Shape Memory Alloys" by Duerig et al., shows a similar connecting element.

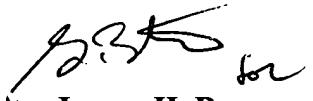
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ernesto Garcia whose telephone number is 703-308-8606. The examiner can normally be reached from 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne H Browne can be reached on 703-308-1159. The fax phone numbers for the organization where this application or proceeding is assigned are 703-

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872-9326 for regular communications and 703-872-9327 for After Final

communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-2168.



Lynne H. Browne
Supervisory Patent Examiner
Technology Center 3600

E.G.

July 23, 2002